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FRACTURES IN THE MASSACHUSETTS GENERAL HOSPITAL.

A Report of some Cases of Fractures treated, during the past Summer, in the Mass. Gen. Hospital, by S. D. TOWNSEND, one of the Surgeons.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The past season having been unusually fruitful in fractures, some of which were of a very severe nature, it is thought that an account of some of those which were brought to the Massachusetts General Hospital, together with their treatment and results, might be read with interest by some of your subscribers.

Of all the different accidents to which men are subject, there is none perhaps more common than fractures, none in which the skill of the surgeon is more manifest, or more conducive to the comfort of the patient; none, likewise, which give more anxiety to the young and inexperienced practitioner, particularly when the case presents some anomalies and the advice of other medical friends is not to be obtained. A detailed report of actual cases, with the particular methods of treatment adopted in each, is much more useful to refer to, and much more likely to relieve this natural anxiety, than those general accounts and directions which alone are to be expected from surgical works.

Some of the following cases will show that costly and complicated apparatus is by no means necessary to a successful result in even very severe fractures, and is now not always used where most readily obtained; they will also show that care and attention will preserve very bad limbs, such as, a few years since, would have been consigned, without a moment's hesitation, to that last resort of the surgeon, the knife. In no branch of the profession has greater and more beneficial improvement been made of late, than in what is so happily described as "Conservative Surgery."

This report is prepared from the records kept by Dr. George H. Gay, the late attentive House Surgeon of the Hospital.

CASE I.—June 9. B. C., æt. 40. Patient, who is a very stout man, and whose countenance indicates that he lives freely, was standing behind a waggon not very heavily laden, when the horse commenced backing; one of the hind wheels struck him, knocked him down, and passed over his leg. Reports that his foot and leg swung backwards, that the bone protruded through the skin, and that he lost much blood.

On examination, find right leg considerably swollen about the middle,

with a wound at its inner third communicating with the bone; the tibia broken obliquely, with its upper fragment prominent and overlapping the lower. The fracture in the fibula cannot be felt on account of the swelling. The protruding bone had been reduced previous to his entering the house.

The leg was placed for the first night in a fracture-box, the wound being covered with lint soaked in blood, over which sticking plaster was applied.

10th.—Patient rested well; leg more swollen, but not very painful or tender. R. *Magnesiae sulph.*, ʒ vi. Extension was this day applied by the following apparatus, contrived by Dr. James Hutchinson, and thus described in Dorsey's Surgery (Vol. I., p. 181). "Two splints of wood are made long enough to extend from the knee to six or eight inches below the sole of the foot; a mortise hole is cut near the lower end of both these splints, and the upper end of each is perforated with four small holes. A piece of wood fitted to the mortise holes of the splints, eight inches long, is to be provided. In applying this simple apparatus, the patient is to be laid on his back, and extension and counter-extension made as usual by assistants; a pillow is placed under the leg, over which is arranged a many-tailed bandage; two pieces of tape are next to be secured by numerous turns of a roller on each side of the leg below the knee; these tapes are to be passed through the four holes in the upper end of the splint and tied; a silk handkerchief is next to be passed round the ankle, crossed on top of the foot and tied under the sole. The fracture being reduced, the bandage is applied to the leg, and the silk handkerchief tied over the cross piece connecting the two splints; by which any necessary degree of extension may be permanently applied."

12th.—Swelling abating. Reports no uneasiness from apparatus, and that he is quite comfortable.

14th.—Some twitching in leg preventing sleep during night. No discharge having taken place as yet from wound, the plaster has not been removed. Complains this morning of pain in right chest. Apply a sinapism to chest. R. Elixir of opium, gtts. xxx. at night, if pain continues.

16th.—Rather restless this morning; some redness about lower part of wound, with some tenderness and pain. Chest easy.

17th.—Last night had cold chills, with headache and some nausea. This morning reports great headache, with pain in back and limbs. Erysipelatous redness with heat and tenderness for two or three inches around fracture. No dejection yesterday. Pulse 100. Skin hot and dry. R. *Hydrarg. submur.*, grs. iv.; *pulv. antimonial.*, grs. vi. M. Ft. chart. 2. Take one now and repeat at 4, P. M.

18th.—This morning erysipelas about the same. Some discharge yesterday for the first time from wound. Was rather restless through the day; slept tolerably well at night after taking *pulv. ipecac. et opii*, gr. x. Cathartic has not operated. R. *Inf. sennæ c.*, ʒ ij.

19th.—Headache continues. No nausea. Leg looks badly; very free and offensive discharge from wound; in centre of redness, the cuticle

is broken, with a slight serous discharge. Tenderness and heat great. Appetite moderate. Pulse 86, but soft. Tongue somewhat coated. R. Hydrarg. submur., gr. j.; pulv. antimonialis, grs. iij. M. Now and at night. Remove bandage from leg; cover the limb with burnt flour flour, over which apply cotton batting.

20th.—Still complains of great headache and soreness of body generally. Leg looks about the same, though was much more easy after application of yesterday. Pulse 90. Skin hot, covered with perspiration. But little appetite. Tongue cleaner. R. Liquid. acet. ammoniz, ʒ ss. every three hours.

21st.—Feels better to-day; less headache; appetite, tongue and pulse better. No dejection. Very free discharge in night from wound, also from an opening in centre of redness where cuticle was removed; a probe introduced here touches denuded bone for some distance. Omit medicine of yesterday. R. Magnesiz sulph., ʒ vi.

22d.—Very free discharge from wound; redness and soreness diminishing.

From this time patient remained improving very slowly, while the process of exfoliation was going on, till Aug. 13th, when a small piece of bone was removed, and also on the next day.

Aug. 15th.—Another attack of erysipelas supervened, which was treated in the same way as the first, except that Velpeau's application of solution of sulphate of iron was tried for two days; it was then changed, at the request of the patient, who was much more comfortable, when the limb was wrapped in batting, covered with burnt flour, its temperature being then more equable.

After this attack, the leg gained rapidly, so that the wound was healed on the 25th. On the 30th, patient walked easily with crutches, and on the 4th of September was discharged well.

The rapid improvement after the second attack of erysipelas seemed to be owing to two causes. 1st. The removal of the dead bone, which allowed the external wound to close and the fractured part to acquire firmness. 2nd. The local stimulus of the disease, which often produces wonderful effects, particularly in promoting union in bones, and in cicatrizing old ulcers, which perhaps have for months resisted the care and skill of the surgeon.

CASE. II.—June 13. J. W., æt. 25. Patient, who was standing on a staging, painting, accidentally stepped on the end of a board, which tipped and precipitated him twenty feet on to some bricks.

On examination, find right leg very much swollen and tense; no discoloration or bruise of the integuments. At about middle of limb is an oblique fracture of the tibia, with the upper edge of the lower fragment somewhat prominent; about two inches below this, a fracture of the fibula; no shortening or displacement; no very great pain or tenderness.

Place limb in a fracture-box. Keep limb constantly covered with compresses soaked in diluted alcohol.

14th.—Had a very comfortable night; this morning leg more swollen, and somewhat painful about seat of fracture. No dejection. R. Inf. sennæ c., ʒ ij.

15th.—Two dejections from medicine. Leg still swollen, but not painful.

17th.—Integuments of leg yellow this morning, but much softer and cedematous.

18th.—Lower fragment of bone continues rather prominent. No pain or tenderness except at this point. Remove fracture-box and apply along calf of leg a splint with a foot-piece attached.

22d.—Swelling remains the same; great pitting of limb on pressure. Apply a many-tailed bandage from foot to knee.

25th.—Thinks leg feels much stronger since bandage. Swelling diminishing.

From this time the limb gradually improved in strength, without any unfavorable symptoms, till the 4th of August, when patient was discharged quite well, having no shortening of leg and being able to walk with ease.

CASE III.—July 17th. E. K., æt. 12. Patient fell through a floor in a house into a cellar, about 20 feet.

On examination, find an oblique fracture of the right femur. Leg somewhat swollen and painful; shortened two inches. Apply extension. This was done by the apparatus commonly used in this Hospital, viz., Dessault's splint improved by Flagg, a description of which may be found in this Journal (Vol. IX. p. 46), and also on page 496 of the American edition of Sir Astley Cooper's work on Dislocations and Fractures, published by the Massachusetts Medical Society. Extended experience has proved this instrument to be not only most effectual for the purpose designed, but also most comfortable for the patient and convenient for the surgeon.

20th.—Considerable swelling along front of thigh and about knee. (The usual attendant of the application of the short splints, caused by the circulation being impeded.) Complains of some pain in knee. Limb of same length with the other, and in good position.

21st.—Swelling of limb extended to upper part of leg. Has but little pain. Bandage limb from ankle up to the short splints.

25th.—Knee much smaller; swelling of leg about the same. Remove splints, and apply to the whole limb a starch bandage.

This was left on till the 29th, when the swelling had so far subsided, that it became loose, and was consequently removed and reapplied.

Aug. 16th.—Walks about ward very well with a crutch. Suffers no pain on bearing weight on limb. Remove starch bandage.

17th.—Union strong. Some pain from bending knee. No shortening of fractured limb.

20th.—Walks with ease. Discharged well.

[To be continued.]

PUERPERAL CONVULSIONS.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The following communication was read before the Montgomery Co. Medical Society, at the annual meeting in June, 1843. Should

you think it possessed of sufficient interest—the whole or any part of it—for publication, you are at liberty to use it for that purpose.

Hallsville, N. Y., Oct. 11, 1845.

U. POTTER, M.D.

GENTLEMEN OF THE SOCIETY,—In discharging the duty imposed by the laws of your Society upon the President, in the delivery of an annual address, I shall be very brief, believing your time of greater value than listening to anything *lengthy* which I might offer. I am now, and always have been, of the opinion, that on occasions like the present, more profit would accrue from taking up a specific subject, discussing the same, and illustrating it with cases, than from a range over the whole field of medical literature; where he having the skill may gather flowers, and exhibit his powers of elocution or display, but will little benefit the practitioner, whose professional duties call him to deal with loathsome and painful disease, or cheer him while combating the open and insidious advances of the implacable foe with whom he is to contend. Without further exordium I proceed to call your attention, for a very brief space of time, to the subject of Puerperal Convulsions.

I have chosen this disease as the subject of these remarks, not so much from a desire to discuss or review the opinions which *have been* or may *now be* entertained in regard to its pathology or treatment, as from an ardent wish to spread before you a case, which to me presented points of awful interest. I say awful, because I made a mistake of an important nature in the very outset—a mistake, however, from which I hope in a measure to be exonerated, when the true details (which I promise shall be faithfully given) are laid before you. I believe, gentlemen, that would every medical practitioner come up in yearly meeting with his brethren, and honestly point out the mistakes of the year, and chart out the shoals or breakers on which he has come near being wrecked, he would perform a more useful and praiseworthy task than the usual one of boasting of his success and embellishing his practice.

CASE.—I. S., a married lady, aged 21, advanced 7½ months in her second pregnancy. I was called to see her at 9 o'clock, A. M., Aug. 2nd. I found her vomiting acid matters, with severe headache. She informed me that she had been troubled during the whole summer with what she called "sick headache" every two or three weeks, with vomiting, after which she would be well until the next periodic attack, which account was confirmed by her mother with whom she resided. The attacks had all previously passed off without medical treatment, but the present continuing longer than usual, medical aid had been solicited.

The patient appeared rather fleshy than otherwise, but no appearance of plethora; no flushing or redness of face, but pale; eyes neither red nor suffused; pulse rather *slow* than otherwise, but soft and free; pain of the head mostly in the region of the frontal sinuses; bowels open; no uneasiness of back or womb; little if any more than natural heat of head, but some coolness of feet and legs; no singing in the ears or flashing of light before the eyes. Such were the symptoms, and they too, premonitory of an aggravated attack of puerperal convulsions, for

which I prescribed the following milk-and-water treatment—a treatment, in my opinion, appropriate for sympathetic headache, but as bad as useless, to say the least, for warding off an attack of the disease under consideration. I ordered her solution of sup. carb. soda, with small doses of rhei; cool applications to the head; warm foot bath, followed by sinapisms to the feet, ankles and stomach; and left her, apprehending no bad result, thinking I had prescribed for a case of sick headache, and not even dreaming of threatened convulsions.

At eleven, A. M., same day, I was called in haste, the messenger saying she “had fits,” and I found her with the following symptoms. Perfectly insensible; breathing stertorous; pupils rather contracted, but dilating and closing by admission or absence of light; heat of head same as in the morning; pulse slow and laboring; extremities warm, and had had five or six strong convulsions. Could feel no motion of the fœtus through the abdominal parietes nor by vagina, through which an examination was instantly made. Womb feeling hard as though partially contracted on its contents and low down against the vagina, but not the least dilatation of the os tincæ.

Treatment.—Venesection a pint bowl full; and no very decided impression being produced, more was suffered to flow from the same orifice into another, till it began to waver—the quantity probably some more than one half a common teacupful. No amendment followed; breathing same as at first, and strong, nay frightful convulsions every fifteen or twenty minutes. Cold continued to the head, and sinapisms to the extremities.

Three o'clock, P. M.—Pulse recovered about the same as before the first bleeding. The bandage was removed and blood suffered to flow from the same orifice into the second bowl (which had been left standing), till nearly filled, when the pulse became nearly imperceptible; slight syncope followed, and almost instantly another fit of the convulsions. Examination now found the womb crowded lower upon the vagina, with the head pressed upon its parietes. Os tincæ almost out of reach of the finger, with not the slightest disposition to dilate, and no motion of the fœtus.

Five, P. M.—The pulse remaining weak, and no amendment in any of the symptoms, I began strongly to fear fatal apoplectic effusion within the cranium, and decided that no further *depletion* at least would be useful or admissible, and that nothing more could be done than to wait patiently, should life be prolonged until the os uteri should so far dilate as to enable me to turn and deliver. Examinations were now made per vaginam every half hour. No change till half past two in the morning, when it was thought a slight and very slight change was occurring in the os tincæ. And now comes what seems to me a very interesting feature of the case; for at the end of the next half hour, viz., three o'clock, the os uteri was found not only dilated but the liquor amnii evacuated, and the head actually in the vagina, and in less than fifteen minutes she was delivered of a stillborn infant, followed rapidly by the placental mass and not a gill of blood. She seemed now sensible of some slight after-pains,

manifesting it by a scowl of the face and an occasional groan. These pains continued but a short time, however, when they seemed to cease, the breathing became free and without stertor, and she lay quiet until five o'clock, when she was seized with a convulsion more frightful and of longer duration than any former one, producing apprehensions of immediate dissolution. The spasm, however, passed gradually off, and she rested (still entirely insensible) till seven, when she had another (and the last) convulsion.

Left her at eight, A. M., directing powerful rubefacients from the feet to the knees, and continued cold to the head. Visited her again at six, P. M. Found the pulse rising and more heat of the head; insensibility still complete, with some tympanitis of the bowels. Opened the right temporal artery and drew about six ounces of blood, when the pulse fell again. Got down with difficulty ten grains of calomel and half an ounce of castor oil. Ordered a continuation of cold to the head, and sinapisms to feet and legs as strong as the skin would bear, and left for the night.

August 4, morning.—Oil and calomel had operated freely; head not as hot as last evening; pulse rising again; still insensible, but able to swallow medicines and soups when put into the mouth. Opened the left temporal artery, during which she partially turned in bed, ejaculated "oh dear" (the first word uttered since the attack), and carried the hand to the head. Remaining treatment same as before. Afternoon visited again. Could be roused to answer questions, though incoherently; pulse still down as left by the last opening of the temporal artery; bowels open and slightly tympanitic.

5th.—Little lochial discharge; labia pudendi and vagina hot and somewhat tender; skin moist; tongue tolerably clean; bowels had moved twice during the preceding night. Objected to the use of the catheter (which had been employed twice daily since the attack), and said she would void the urine herself, but was unable, and the catheter was passed. Ordered continuation of cold to the head, fomentations to the abdomen, and solution of cr. tart. in mucilage as drink.

6th.—Fully sensible; head cool and pulse quiet; had voided urine without assistance during the night; labia and vagina moist, and heat gone; milk secreted freely, but the bowels running so as to drive her up at least every half hour. R. morphine, gr. 1-8; ipecac., gr. j.; sod. carb., gr. x. Mix. To be taken every fourth hour.

7th.—Symptoms all favorable; bowels quieted. To stop the powders, and take only sub-acid and mucilaginous drinks. No daily notes were taken from this time, as the case progressed rapidly and regularly to recovery.

Remarks.—I have thus, gentlemen, given minutely (indeed tiresomely so) the details of this case as I promised in the commencement; and if there be nothing interesting in the treatment or progress of the attack, yet I feel morally certain, that if premonitory symptoms like those detailed may be followed by an aggravated attack of puerperal convulsions, some at least of my professional brethren may be benefited by

having the case spread before them, and thus better enabled to shun the rock on which I split. I doubt not many of you have prescribed, in pregnant females, for what is vulgarly called sick headache, with symptoms precisely similar to those described in my case, and seen them pass off without ever apprehending an attack of eclampsia. Most writers on this disease, if I mistake not, describe the premonitory symptoms as follows, viz.—Disposition to fulness or plethora, evinced in flushing of the face, redness of the eye, flashes of light, giddiness, partial loss of sight, *continued headache*, with habitual costiveness; none of which were present with my patient before the coming on of actual convulsions.

Burns, in describing sympathetic headache from indigestion, uses these words:—"All headaches, however" (referring to that which usually precedes convulsions) "do not forebode these dismal events, for they often proceed from the stomach, and evidently depend on costiveness, dyspepsia, or nervous irritation. These are generally *periodical*, accompanied with a pale visage; they feel more external than the former, and are often confined to one side of the head. They are attended with acidity in the stomach, eructations, and sometimes with considerable giddiness, or slight sickness, with bitter taste in the mouth. They are relieved by the regular exhibition of laxatives, sleep, the moderate use of volatiles, and the application of ether externally."

Thus we see a complete enumeration of the symptoms of my case, viz., periodical headache, pale visage, acid vomitings, &c., for which Burns would have prescribed volatiles, both internally and externally, followed by dangerous convulsions; and although I made a mistake which might have proved fatal to my patient, I learned a lesson, which while I practise medicine will not be forgotten.

REVIEW OF A LETTER ON HOMŒOPATHY.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—In the Journal of Oct. 8th, is a letter from an old physician on Homœopathy—giving his reasons for not believing in it—which is a good-natured, candid article, and a fair specimen of *anti-homœopathy*, and perhaps is a fair and conclusive argument in the minds of those who are ignorant of the real principles of the homœopathic school. The author acknowledges he has read very little on the subject, which is evident from the fact that in the first paragraph he exposes, as he imagines, three fundamental errors of homœopathy, not one of which is believed by the homœopathic school, or ever has been. He says, "when this system was first announced, with the strange assumption that most diseases proceed from the *itch*," &c. I know of no one who believes that the Psora of Hahnemann is what is meant by the *itch*. It is true that he makes a majority of chronic diseases to arise from psora, but not more so than Lugol does from scrofula, or the British writers from tubercular disease, and they are nearly or quite identical. Again, "that all diseases were cured by medicines capable of producing the *same* disease in the

healthy body,"—a doctrine which it will be difficult to find in any homœopathic writer—and "that a millionth part of a grain of any ordinary medicine, divided and subdivided by some hocus pocus agitation, would produce a greater effect on the constitution than a full dose of the same." "He was struck with these absurdities," &c.; and who would not be? and this is the reason that the subject is dismissed as "the baseless fabric of a vision."

Now it is strange that any man, old or young, should make up his mind to receive or reject any doctrine of which he knows so little. It is not held that a fraction of a grain of medicine will produce more effect on the constitution than a whole grain—but there is a difference between an effect upon the *constitution*, and an effect upon the *disease*. Here is a point which our friend in his 85th year has probably never found time to consider, and it is a point where the two schools differ. The homœopaths hold that medicines may be so prepared that a small dose is more effectual in counteracting diseased action, than a large dose which does affect the *constitution* too sensibly *instead* of the disease. Examples are familiar to all, where a remedy becomes more efficient by minute division—mercury, for example. I am perfectly satisfied that one reason why such men as W. consider the subject all quackery, is because they found their conclusions upon assumed premises, such as have never been held to. It seems to be a great stumbling block to our professional brethren that disease should be eradicated without any other sensible effect upon the sound organs, and to do so must be quackery; but it seems to me, if this can be done, it is the more scientific, and the less the constitution is affected, provided the disease is eradicated, the better; and if medicine can be so attenuated as that the poison of the disease and the poison of the remedy shall by exact rubs be brought in contact and neutralize each other, and the *constitution* perceive nothing but a cessation of the symptoms, where is the harm, or "quackery, or transcendentalism, or Germanism?" Is not this the manner in which we wish to get the effect of opium in severe pain, and of other remedies also?

Homœopathy is accused of assuming the position of a science. Now the ordinary practice is admitted to be very imperfect, and susceptible of great improvement, and that to cure disease by it is very unpleasant both as to the taste and effect of the medicine on the constitution. But if medicine can be so used as to avoid this in a great degree, is it not scientific? But it is looked upon and believed because the power of steam and electro-magnetism, which were at first held as humbugs, have not blown to the winds—and for the very same reason that they are alike founded on a substantial basis—and not on such positions as are assumed by W. He says, "It is imaginary nervous and chronic complaints, which afford the most promising field for homœopathy." Begging his pardon, it is the reverse exactly, according to the testimony of all who know anything of the subject. Still the system of diet is allowed to be *excellent*, as well as the plan of simplifying remedies. Now the diet is no better than the rest of the practice—it is in exact accordance with the therapeutic means. W. says he is "told a few weeks are allotted for

any sensible effect." This may be necessary for a cure in some cases, it is true, as in other practice; but there are cases where the effect of the medicine is as speedy as in any other method. I have repeatedly relieved severe and excruciating neuralgia of the face, assuming a form similar to mercurial salivation, in five to ten minutes, with homœopathic doses of mercury—which had resisted sul. morphine in 1-6 grain doses repeated to ultimate narcosis. I have relieved cystitis with infinitesimal doses of cantharides, more speedily than with any other remedy; have arrested cough of three weeks standing in twelve hours, with 3 attenuation of *arsenic* where it was indicated. Cholera morbus is often speedily arrested by veratrine, and colic by colocynth, &c.; but the case must be appropriate and the condition of the system such as to indicate the remedy. As to imagination, I prefer that the patient should have no knowledge of or confidence in homœopathy—even children and in an insensible state. From those patients who are full of faith, confidence and imagination, I can truly say, "good Lord deliver us." He goes on to speak of experience as fallacious; if as much so as he contends, truly we are in a dilemma, and had better look for a surer method. That homœopathy is the more critical and exact practice of the two, is claimed; but the idea that it is a mathematical exactness is not true, nor will it be, so long as we operate on the laws of vitality instead of mere physical principles.

The truth is, W. has entirely mistaken the fundamental principles of homœopathy as well as the practice, and this is the reason generally of so much prejudice. We hope W. may be permitted to watch the progress of the "new light," to see whether it is an "*ignis fatuus*"; but it is hoped he will be able to distinguish between the doctrine and facts in homœopathy, and the visions and mysticisms which have been thrown around it.

Yours respectfully,

D. HOLT.

CONTAGION OF PUERPERAL FEVER.

[THE following remarks on a most important subject are from "Lectures on Puerperal Fevers," delivered by William Harris, M.D., of Philadelphia, to a medical class, and recently published by request of the class.]

Is puerperal fever of a contagious nature? This is a question of grave import and deep interest to medical science. Upon this subject my own mind is still unsettled; but the facts, I am free to admit, preponderate on the affirmative side, and afford almost a demonstration that contagion ought to be regarded as one of the causes of this frightful malady.

Nearly all the obstetricians that have attended the lying-in hospitals, extensively, maintain that this fever has contagious powers. Professor Hamilton affirms that the infection is of so concentrated a nature that it may be communicated, like smallpox, through the medium of a third person; and this opinion is embraced by many of the more modern writers. Dr. Campbell says that, after dissecting a woman that died of

puerperal fever, he went the same evening, without changing his clothes, to deliver a poor woman in the Canongate, who afterwards died of the same disease; in the same clothes he delivered another woman with forceps, who also died, and three others in succession shared the same fate. Dr. James Orr, after dissecting a female that died of the disease at Carron-Mills, for want of accommodation did not wash his hands carefully, and, without changing his clothes, attended two females in their confinement, both of whom were seized with the disease and died. "It is a disagreeable declaration for me to mention," says Dr. Gordon, of Aberdeen, "that I myself was the means of carrying the infection to a great number of women; and I have evident proofs that every person who had been with a patient in the puerperal fever became charged with an atmosphere of contagion, which was communicated to every pregnant woman who happened to come within its sphere." Dr. Gooch, after opening the body of a woman that died of puerperal fever, continued to wear the same clothes, and delivered a lady who was attacked by the same disease and died, and two others in rapid succession shared the same fate. Alarmed at the thought that perhaps he was carrying contagion in his clothes, he instantly exchanged them for others and met with no more cases.

A nurse in the country, says Moore, after washing the clothes of a person that died of puerperal fever, communicated the disease to the next person she nursed, and to a third, both of whom died; and the inhabitants of the place, becoming alarmed, ceased to employ her.

Dr. Blackmore, whose essay I have already quoted, contends that the disease "is contagious in each of its forms, *sthenic* and *putrid*." The epidemic, he says, commenced with the patients of a single accoucheur, and was confined exclusively to his practice for several weeks. He had eighteen cases in rapid succession, eight of which terminated fatally, while not a single case was heard of in the practice of any of the other accoucheurs. He communicated the disease to his first puerperal patient by conveying to her the infection of erysipelas, and afterwards carried the puerperal contagion in his clothes, from patient to patient. "A young sage-femme of La Maternité," observes M. Chailly, "who was not pregnant, died during the prevalence of a disastrous epidemic, presenting all the symptoms and all the anatomical characters of puerperal fever." A cat, upon the authority of Dr. Copeland, died, during the prevalence of an epidemic, in one of the wards of an ill-ventilated lying-in hospital, soon after she had kittens, with all the characteristics of puerperal fever. Dr. Spackman, who attends to a large obstetrical practice in the western part of this city, officiated as accoucheur to three patients, in rapid succession, in May last, all of whom died of puerperal fever; apprehensive that he was carrying contagion in his clothes from one patient to another, he immediately absented himself from the city for a period of three weeks, when he returned to his practice, and has had no case of fever since. Dr. Condie, of our city, a gentleman of great professional attainments, in speaking of the epidemic of 1842, as it occurred in Southwark and neighboring districts, says that "the disease

was exclusively confined to the circle of a single physician, extensively engaged in obstetrical practice, while no instance of the disease has occurred in the patients under the care of any other accoucheur practising in the same district; scarcely a female that has been delivered by this gentleman, for weeks past, has escaped an attack, and nearly every case of the disease terminated fatally." The distinguished accoucheur to whom Dr. Condie alludes in the above remarks, apprehensive that this desolating epidemic was propagated, not by atmospheric influence, but by personal communication, resolved to try the sanatory influence of country air, and accordingly left the city for a week, and, after the appropriate ablutions of his person, he exchanged every article of his old wearing apparel for new; but to his great mortification "the first case of parturition that he attended, after his return, was followed by an attack of the fever and terminated fatally." By this experiment the doctor satisfied himself that the disease was not transmitted by contagion conveyed in his person or clothes, but propagated by a distempered state of the atmosphere. From this conclusion, however, I beg leave to dissent. Either the time that the doctor absented himself from his professional duties was not sufficiently long, or he unintentionally retained some portion of his clothing which was still charged with contagion; because during his absence his patients were attended by other accoucheurs without a single case occurring—and as soon as he returns to the district the fatal malady returns with him. Besides, Dr. William Klapp, residing in the same district, attends patients in the same streets, and often in adjoining houses, officiated as accoucheur to about two hundred cases the same year (1842) without encountering a single case of the disease. The only puerperal patient, indeed, that Dr. Klapp has had, fell into his hands last spring, after she had undergone a *per vaginam* examination by the homœopathic doctor before alluded to, and by him abandoned on account of the fatality that attended his practice. This case terminated fatally in less than twenty-four hours after the attack. Dr. Klapp refused, after the death of this patient, to attend any more obstetric cases for three weeks, when he resumed his practice and has not had a puerperal patient since.

These facts are full of interest, and, in my judgment, would settle the question as to the contagious character of puerperal fever, were it not that many other accoucheurs, and, some in our own city, have dissected the bodies of females that died of the disease, and afterwards, without changing their clothes, have attended lying-in women repeatedly, without propagating the disease.

ON THE HYPOTHESIS OF ELECTRIC CURRENTS IN THE NERVES.

By M. Matteucci.

NEVER having been able, in our former experiments, to establish, by aid of the galvanometer, the existence of electric currents in the brain, the spinal cord, or in the nerves of the dog, the rabbit, and the frog, we

wished to make a new trial on an animal of large stature (*the horse*), hoping by this means to place ourselves in the most favorable condition for researches of this kind.

The galvanometer which we employed in these new experiments was constructed by Rumkorff, and was extremely sensible; the conducting wire, making two thousand five hundred convolutions, was furnished at each of its extremities with a *platinum plate*, fixed on an ivory handle, and so varnished as to leave only a square centimetre of its surface exposed. The needle made one oscillation in seventy seconds.

Before applying the two platinum plates to the nervous parts, they were immersed in spring-water for a very long time, and until the signs of the current, which are always observed at the first immersion, had completely disappeared.

These precautions having been taken, and the live horse having been thrown down upon a table, its sciatic nerve was insulated from the neighboring muscles (by means of varnished silk) for a length of thirty or forty centimetres (upwards of one foot), was carefully wiped, and left in communication with the cerebro-spinal axis.

After being well assured that the needle constantly remained at zero, although either one or the other of the platinum plates was removed from the water and alternately reimmersed, the plates were placed in contact, first with the surface of the sciatic, then, after the neurilema had been removed, with different points of this voluminous nerve.

The interval of deviation, namely, the distance comprised between the two plates, being at first 3 or 4 cent., the needle sometimes remained at zero, and at other times deviated several degrees, soon returning to zero. This interval having been suddenly extended to 15 cent., the deviation ought to have been notably increased, in the same direction, if electric currents existed in the nerves. There was nothing; or rather the needle did not deviate to a greater number of degrees than in the preceding case, and its deviation was still only momentary, or else was entirely wanting.

It is important to bear in mind that during the continuance of these experiments, in consequence of the pain which was voluntarily excited in the animal, its posterior train was the seat of energetic and repeated efforts, and that, consequently, the extremities of the galvanometer were put into communication with the sciatic nerve at the very moment when it was transmitting the exciting influence to the muscles of the thigh and leg.

If, by varying our trials, we have occasionally perceived a very sensible deviation of the needle, it is important to notice *that this deviation did not change in direction, although the contacts were inverted*; that, moreover, it so occurred every time that the nerve was touched *simultaneously* with the two plates of the galvanometer. At the moment when these plates were successively plunged into water deviations were also obtained, which did not differ from those that are observed on inserting the extremities of the instrument in the nerve itself.

Bearing in mind the extreme sensibility of our galvanometer, the favor-

able condition of the experiment, and the precautions which we have taken, we think we are authorized in concluding that there does not exist any trace of electric currents in the nerves of living animals appreciable by the instruments we at present possess. In addition we may add, that our previous researches had already conducted us to the same conclusion.—*Electrical Magazine.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, OCTOBER 22, 1845.

Surgery of Fractures.—A communication on the treatment of fractures is commenced in the Journal to-day, which is worthy of the perusal of gentlemen in surgical practice. Dr. Townsend, one of the Surgeons of the Massachusetts General Hospital, has had a degree of experience that gives great value to whatever he may find it convenient to communicate to the medical public. As an operator, his carefulness, neatness, manual dexterity and success, have long been acknowledged by those who visit that institution for improvement.

Cowardly Criticism—Homœopathy.—By the merest accident imaginable, the writer of an abusive anonymous letter to the editor of this Journal, written on account of the publication of a late article by an old physician, on homœopathy, was detected. He is the last man we should have fixed upon to be guilty of such a mean, cowardly act. Notwithstanding his great love of homœopathic practice in medicine, he did not scruple, in his fancied security, to deal us out allopathic doses of insult, which should have been beneath the thoughts of one who ever presumed to be a gentleman. His very uncalled-for, and pointedly insulting note, to which he has affixed the signature of "Not an M.D.," will of course have no influence in making us otherwise than perfectly tolerant in this publication towards all medical practitioners, of personal respectability, who may write for its pages. Although familiar with the author's name and residence, it is not a subject of gratification to us, since it so lessens our estimate of one who must already be exceedingly ashamed of himself.

Pectoral de Cerise, or Compound Cherry Pectoral.—Mr. Jas. C. Ayer, of Lowell, a druggist of high respectability, has made a new preparation for popular use, which is considered an excellent remedy for ordinary coughs. Utterly as we are opposed to all secret compounds, under the inviting name of specifics for particular diseases, it comes within our province and gives us pleasure to speak with approbation of those who freely make known recipes of medicines intended for general employment, from whatever source they may emanate. Mr. Ayer informs us that his cough mixture is the following:—R. Morph. Acet., gr. iv.; tr. sang. can., 3 ij.; vin. antim. tart., vin. ipecac., aa 3 ij.; syr. prun. virg., 3 ij. M. The equivalent ultimate principles are here combined in their purity, says Mr.

Ayer, viz., morphine, sanguinerine, tart. ox. antim., emetine., hyd. cyan. acid., saccharum, spts. et aqua. The introduction of the acid is thought, by the proprietor, to constitute the peculiar merit of the medicine. Practitioners, if they choose, can make trial of the prescription in those affections which require active expectorants to subdue a troublesome and increasing cough. If found, on trial, to answer the purpose, and to be superior to ordinary mixtures resorted to in the early stages of lung complaints, there would be no impropriety, and certainly much convenience, in purchasing the article in the elegant form in which it is offered by Mr. Ayer.

Calisthenic Academy.—Dr. Thayer, whose experience in conducting a calisthenic institution is well known in this community, has just commenced a new term at Boylston Hall. It is a great privilege to have access to such a variety of convenient and ingenious mechanical contrivances for developing the muscular system. Parents should avail themselves of the important benefits of this well-managed academy, and allow their children to sport and grow in the full enjoyment of its gymnastic exercises. Once a week is better than nothing; and all the little feebly-organized pale-faced misses, and gaunt, lank, white-faced boys, in the city, should be put under Dr. Thayer's guidance. The academy also holds out one of the surest remedies for shop-worn clerks, indolent students, and those literary appendages of society who only exercise the brain. The muscles were designed to be used—every one of them; and when nature's intentions are fulfilled to the letter, a broad chest, round limbs, an erect stature, good lungs, bright eyes, red cheeks, health and happiness, are pretty sure to follow.

Tabular View of Auscultation.—From the second English edition of Dr. Bellingham's elaborately constructed scheme of the condition of the organs of the thorax, as developed by auscultation, the first American edition has been published, under the editorial supervision of that very accurate observer, Usher Parsons, M.D., of Providence, R. I. For those who are pursuing the class of investigations contemplated by the author, this chart must be of peculiar value, and it is therefore recommended to their special consideration. Copies are on sale, at a very reasonable price, at the Journal office.

New York Medical and Surgical Reporter.—With this title, a new Journal, to be issued every other week, is to be published in New York, under the editorial care of Clarkson T. Collins, M.D., which is recommended to favor by medical gentlemen of that city. It is to consist principally of reports of clinical lectures, &c., at public institutions in New York. There are now three Medical Journals there, which should have all the encouragement the profession can bestow upon them. Without the constant influence of those who really wish for the advancement of the science of medicine and surgery, it is impossible to sustain a periodical exclusively devoted to these great interests.

Lying-in Hospitals of Europe.—James Bryan, M.D., of Philadelphia, formerly professor of Surgery at Castleton, Vt., has presented to the

managers of the Preston Retreat, and to the Obstetrical Committee of the College of Physicians, an admirable historical sketch of the lying-in hospitals of Europe. It is a creditable affair, evincing a taste for research, and a habit of industry that, with a due degree of perseverance, invariably leads to distinction. We shall endeavor again to turn to the pamphlet.

Diseases of the Southern States.—At the close of a recent letter to the editor, by Dr. P. H. Lewis, of Mobile, he incidentally introduced the appended remarks, which it strikes us are of much more value than might at first be apprehended. "If it is a matter of any interest, you will see some notes on our local diseases, in the January and March Nos. of the New Orleans Journal. They are disjointed, but the facts are sifted with much care. You will discover that I have endeavored to point out the difference not between yellow and bilious fever, but to show the absolute absurdity of classing it (yellow) with the phlegmasiæ. *Yellow fever* should have a new name and a new place in our nosological system. I see by the last New Orleans Journal, that Dr. Harrison holds views kindred to those to be drawn from the facts recorded by myself. The subject of our diseases here, is of deep interest to a few of us, and we are just beginning to investigate them in a proper spirit."

Portable Baths.—A letter is lying before us from a gentleman who is desirous of knowing where the portable bathing apparatus, invented some years since by Dr. J. Wright Warren, of this city, may be purchased, &c. Unfortunately for the writer, who is evidently a man of intelligence, and whom we should be delighted to oblige by a speedy answer by mail, his letter, although post-paid, and asking an immediate answer, has neither date nor the address of the town in which it was written. We therefore take this method of informing him that none of these baths are to be had at present. All those which were on sale, were destroyed by fire, and none have been since manufactured.

Betel and Tobacco.—All the ready money in the neighborhood of Oodooville, East Indies, where an American missionary is stationed, is realized from the sale of tobacco and betel leaves. About two millions of tobacco leaves are raised annually—of which fifty, in trade, are called a parcel; they cost not far from nine shillings, sterling, for a thousand leaves. An entire crop is assumed to be somewhere near four hundred and fifty pounds. Betel leaf sells from two to two and a half pence a hundred leaves. Areca nuts are also chewed. A mixture of betel and tobacco is in almost universal use for chewing, in that section of the world. To give the quid, is a mark of friendship and politeness, and, like all favorite stimulants, is thought to be good for everything, physical as well as moral. It is agreeable to the taste and the smell, beautifies the teeth, reddens the lips, sweetens the breath, gives warmth to the cold, and coolness to the warm; brightens the countenance, quenches thirst, soothes hunger, promotes digestion, cures paleness, rheumatism and jaundice. Every man is supposed to use half a farthing's worth of the delightful compound,

daily, or about a shilling's worth a month. It is also usual for ordinary consumers to smoke from once to twelve times a day.

It is stated by the Rev. Mr. Whittlesey, who has charge of a missionary school for females in Oodoorville, India, that he has been troubled with the discovery that narcotics, betel and tobacco, are used by the young girls. He wholly forbid them—but what was his surprise, a few days after, on receiving a petition from some of the heathen misses, praying to be allowed to go to a retired place and smoke only “*once a day.*”

Puerperal Fever.—The following is the conclusion of the Lectures on Puerperal Fevers, by Dr. Harris, of Philadelphia, referred to in another part of to-day's Journal.

“The investigation which I have given to this difficult subject, has led me to the following conclusions:

“1st. That puerperal fever is not a specific disease; that it appears under different forms, and assumes every variety of type, from the lowest congestive to the highest inflammatory; and that the physician who always assails this Protean malady with stimulants, will be as often disappointed in his expectations as he who is determined to subdue every case by the free use of the lancet.

“2d. That physicians have erred in supposing puerperal fever to exist only in the particular form of disease which they themselves have observed; and in assuming that the treatment which was most successful in one epidemic must be equally efficient in all. In other words, the great mistake has been in prescribing rather from the name of the disease than its symptoms.

“3d. That there is no medicine, with which the profession is acquainted, that exerts a specific action on any form of puerperal fever.

“4th. That the inflammatory type of the disease is the more mild and medicable, and will yield to early and copious bleeding, aided by other depletory measures.

“5th. That in the adynamic form of the disease, where early collapse precludes all antiphlogistic measures, the only judicious plan of treatment is to support the patient by light nutrition, tonics and stimulants, and trust to the *vis medicatrix naturæ*; as a critical abscess pointing outwards, or some other critical evacuation, may conduct the case to a favorable issue.

“6th. That pathological anatomy has afforded the profession but little assistance in investigating the character of the disease at a curable period; but has only exhibited the extent of its ravages when it had attained a height at which it must be fatal to life.

“7th. That close observation of the phenomena which the disease presents during life is of more importance to medical science, than inspecting the changes which are to be found after death.

“Beyond these conclusions I am not prepared to go. There are still some points connected with the character and treatment of puerperal fever, about which my mind is not satisfied, and when I revert to the little success that has attended the efforts of our profession to arrest its ravages, I am willing to acknowledge with Burns, ‘that I find it much easier to say what remedies have failed, than what have done good.’”

Removal of a Drill-head from the Cavity of a Tooth by means of a Magnet. By JOHN HARRIS.—Whether I have been more unfortunate than other dentists in having my drills too highly tempered, I cannot say; but, in consequence of this oversight, I have occasionally had them to break, while preparing the cavities in decayed teeth for filling, leaving the burr or head in the cavity; and in some instances, though it appeared quite loose, and upon the slightest touch would move about, its removal was attended with considerable inconvenience and loss of time, and sometimes the loss of more of the sound part of the tooth than would otherwise be necessary or desirable.

In preparing a small cavity in the grinding surface of a bicuspid of the lower jaw, for a lady, after having it nearly ready to fill, having removed the most of the diseased parts, my drill broke, leaving the burr at the bottom of the cavity; the walls of which were sound and very dense, and so close to the burr as not to admit of the passage of any small instrument between it and them, in order to remove it, and yet so loose as to be readily moved in any direction upon its axis. Not feeling desirous of adopting the usual course resorted to in such cases, that of removing enough of the adjacent sound tooth to pass a small instrument between it and the surrounding walls, considerable time was consumed in fruitless efforts to remove it. I accidentally recollected of having seen a small magnet the same morning at a druggist's store but a few doors from my room, which I immediately procured, and with which the burr was instantly removed.

Should the like accident happen with other dentists, I believe much labor, time and inconvenience will be saved by adopting the above plan for its removal.—*American Journal of Dental Science.*

St. Louis Hospital.—We have before us the plan of an hospital which has already been commenced, as directed by our City Council. It is to be erected on an elevated ridge in the southern portion of the city—a situation combining many of the most essential requisites for such an institution. It is to be regretted, however, that the elevation of this site will render it impossible to furnish the hospital with water from the present water works. As an abundant supply of this element is of primary importance in an establishment of this character, we hope that some means may be devised to obviate this difficulty, and that the hospital may not only be provided with a sufficiency of this great desideratum, but also that it may be conducted into every ward and story of the building.

The main body of the hospital will have 206 feet 6 inches front, and 50 feet 6 inches depth; on each extremity of the building, there will be a wing measuring 97 feet 6 inches by 30 feet 6 inches, running back from the main building and forming right angles with it. In the basement there will be the superintendent's room, male and female servants' rooms, male and female refectory, kitchen, pantry, store-room, male and female bathing rooms, washing and ironing rooms, several furnace and fuel rooms, eight cells for male and four for female insane, dissecting rooms, male and female dead rooms.

In all the stories, the rooms of the main building are divided by a longitudinal passage. There is also a gallery around the inner walls of the

hospital. The privies are at the extremity of each wing. On the first floor, above the basement, we remark six male and three female wards, besides a lying-in-room; and also two wards for male and female children, and several nurse's rooms. The physician's office, the pharmacy, the porter, and linen rooms, are also on this floor.

On the second floor there are nine wards for males and four for females, besides a hall for prayer and lectures, and rooms for nurses.—*St. Louis Medical Journal*.

Graduated Wine Glasses.—L. S. Reynolds, druggist, of this city, has received an article, new to us, entitled as above, which we think the profession would do well to recommend for families to provide themselves with. It is a wine glass of large size, graduated to administer tea-spoonful and table-spoonful doses of liquid medicines in the exact quantity intended to be expressed by these conventional terms of measure. Owing to variations of capacity in the table and tea spoons in common use, the quantities which these terms denote are very inexact, which, in several points of view, is an evil of not a little consequence. The introduction of these graduated glasses will establish an uniformity and precision in the administration of medicines which are very desirable.—*Buffalo Med. Journal*.

Medical Miscellany.—A Mr. Geo. Long, of Quincy, Mass., recently lost his life by skinning an ox that had died. A small scratch on one finger imbibed the fatal poison.—Dr. S. J. W. Tabor, of Massachusetts, and Dr. Thomas C. Shreve, of Ohio, are candidates for State Senators.—Of the several candidates who were examined before the army medical board, lately in session at New York, the following named gentlemen were approved and recommended for appointment in the medical staff of the army, viz., John Frazier Head, M.D., of Massachusetts; Lewis A. Edwards, M.D., of the District of Columbia.—The smallpox exists to considerable extent in Baltimore, and also in many other cities on the Atlantic border.—Dr. Holmes, editor of the *Maine Farmer*; Dr. Lee, editor of the *Genessee, N. Y., Farmer*; Dr. Darlington, West Chester, Pa.; Dr. Houghton, Detroit; and Dr. Mews, Cambridge, Md., have been elected corresponding members of the *Farmer's, Gardener's, and Silk Grower's Convention*, New York.—A patent is said to have been taken out by a gentleman in Troy, N. Y., for converting animal matter into stone.—Dr. McMinn, of Tuscaloosa, Alabama, in the *Western Lancet*; and Dr. John Harris, of Annapolis, Md., in the *Journal of Dental Science*, refer to cases of hare-lip in the negro which have come under their observation. Most of the cases seem to be severe ones.

MARRIED.—Elijah Baldwin, M.D., of Plainfield, Con., to Miss S. H. Mathewson.

DIED.—In De Soto Co., Mi., Dr. Moody Hall, a native of Massachusetts.

Number of deaths in Boston, for the week ending Oct. 18, 35.—Males, 17; Females, 18. Stillborn, 6. Of consumption, 9—old age, 1—disease of the liver, 1—brain disease, 2—croup, 2—infantile, 3—dropsy on the brain, 1—disease of the heart, 2—typhus fever, 2—pleurisy, 1—measles, 1—dysentery, 1—canker, 3—hooping cough, 1—convulsions, 2—accidental, 1—disease of the bowels, 1—drowned, 1. Under 5 years, 18—between 5 and 20 years, 1—between 20 and 60 years, 14—over 60 years, 2.

Case of Suppuration of the Colon, excited by the Presence of a River Pebble. Read to the Medical Society of Tennessee, May, 1845. By J. IRWIN, M.D.—Miss A. M., aged 16 years, of plethoric habit, was attacked with severe pain in her right side in February, 1842. When I saw her, I found her with a soft and regular pulse, skin natural, tongue clean, and feet cold. In this attack she was confined to bed for two months; the treatment consisted in cupping, leeching, blistering, and fomentations, with purgatives, and the usual remedies, but all afforded no relief. Nothing gave her any relief except morphia; while the system was kept under its influence she complained of no pain, although there still remained great soreness of the side, and this was so great that when she was able to go about the house, she could not bear her clothes to be fastened on her.

In the winter of 1843, she had a similar attack, which I treated with anodynes alone, and she was soon able to be about again, although she still complained of the tenderness of the side. I proposed a seton, but she objected so much that I declined trying it. During the ensuing fall she suffered severely for five or six days with violent acute pain in the same region as formerly, which was relieved as before by morphia, but the soreness still remained. In the following March she was again attacked with acute pain of a throbbing character; her skin and tongue, however, were natural; her pulse soft and regular; bowels costive. I gave her a dose of aloes, rhubarb and scammony, which operated four times freely, and in one of the discharges there passed from the patient a lump about the size of a nutmeg, which on examination by her mother proved to contain a small irregular pebble, such as is found in rivers and creeks. From this time forward she recovered rapidly, the soreness in her side declined, and she felt nothing of it for six or seven months, when in attempting to learn to weave she strained herself, and was again taken with violent throbbing pain at the same point, which continued for seven or eight days, the side being swollen and very tender on pressure; her stomach became irritable, and in attempting to vomit, she said she felt something break inside, and could feel a fluid run. A few hours after this occurred she had a discharge from the bowels, which consisted chiefly of pure, well-digested pus. The quantity was considerable, and the discharge continued for seven or eight days, when it ceased altogether, and since that time the patient has enjoyed good health and has never complained of her side.

The account given to me by her mother of the introduction of the pebble into her stomach was, that when a child, 7 or 8 years of age, she was in the habit of playing with pebbles from the river, frequently going to sleep with them in her mouth; in this way, it is supposed, one was accidentally swallowed, and lodging in a fold of the colon remained there for seven or eight years, giving rise to the train of symptoms described.—*Western Journal of Medicine and Surgery.*

The Urine of the Cow as a Remedy.—In a paper of M. Boussingault, is a fact which, he observes, will surprise chemists and physiologists; it is, that "the urine of herbivorous animals contains bicarbonate of potass, and not, as is generally believed, subcarbonate. With the urea and hippuric acid this urine curiously resembles an alkaline mineral water. It might be employed to dissolve uric acid calculi. I speak more seriously than you will be disposed to believe, when I say that I should have more confidence in the urine of one of my cows than an alkaline solution prepared by many celebrated chemists."